

FIG. 1

Parallel Fan Powered VAV Terminal w/ heat Delivery Book

MODEL VERIFICATION		Unit Tag (FPVAV)
		VAV A-4
1. Manufacturer	Submitted	
	Delivered	
2. Model Number	Submitted	
	Delivered	
3. Max/Min Airflow (cfm)	Submitted	/
	Delivered	/
4. Serial Number	Submitted	N/A
	Delivered	
5. Inlet Diameter, inches	Submitted	
	Delivered	
6. Heating MBH/gpm	Submitted	/
	Delivered	/
7. Fan Power/Speed, (hp/rpm)	Submitted	/
	Delivered	/
8. Total Static Pressure, in w.g.	Submitted	
	Delivered	
PHYSICAL CHECKS		
1. The box is free of physical damage		yes / no
2. The air openings to the box are sealed with durable plastic		yes / no
3. The airflow sensing tubing is plugged		yes / no
4. The local electrical disconnect is in the proper location		yes / no
PHYSICAL CHECKS		
5. The enclosure for the DDC control panel is in the proper location		yes / no
6. The grommets for the airflow sensing tubing are secure		yes / no
7. Unit tags affixed		yes / no
8. Manufacturer's ratings readable/accurate		yes / no
Tracking Cards		
1. Pull the Appropriate Tracking Card Labeled ----->		VAV A-4

"No"

Responses:

Item	Reason for "No"	Item

094810-0300

FIG. 2

Parallel Fan Powered VAV Terminal w/ heat # _____ [Fill in Tag #]

Hanging

[fill in box number]

Instructions: Step 1: Circle Yes or No, or fill in with requested information.
 Step 2: Explain all "No" responses at the bottom of the card.
 Step 3: Attach bar code sticker from equipment when finished, return card to your Field Supervisor.

Item		Response	
		Yes	No
1	Unit identification tag easily visible	Yes	No
2	Unit is individually supported from structure and not from adjacent ductwork	Yes	No
3	Adequate clearance around control box for maintenance	Yes	No
4	Clear access below box to remove bottom access panel for easy maintenance	Yes	No
5	Metal to metal connections eliminated to prevent noise problems	Yes	No
6	All shipping and installation materials are removed	Yes	No
7	Box openings temporarily sealed to maintain system cleanliness	Yes	No

"No" Responses ←

Item	Reason for "No"

Place Sticker Here

FIG. 3

Parallel Fan Powered VAV Terminal w/ heat # _____ [Fill in Tag #]

Connecting Ductwork

[fill in box number]

Instructions: Step 1: Circle Yes or No, or fill in with requested information.
 Step 2: Explain all "No" responses at the bottom of the card.
 Step 3: Attach bar code sticker from equipment when finished, return card to your Field Supervisor.

Item		Response	
		Yes	No
1	Balancing damper present on inlet duct	Yes	No
2	1 1/2 diameters of straight ductwork installed prior to VAV box damper	Yes	No
3	Ductwork free of transitions for at least 36"	Yes	No
4	Maintainable items (actuators, dampers, sensors, etc.) are accessible for easy maintenance	Yes	No
5	Flexible connector (vibration isolator) installed on inlet duct to avoid noise problems from metal to metal contact	Yes	No
6	Flex duct is installed in a way that avoids forming kinks on both inlet and outlet ductwork	Yes	No

"No" Responses ←

Item	Reason for "No"

Place Sticker Here

FIG. 4

Parallel Fan Powered VAV Terminal w/ heat # _____ [Fill in Tag #]

Piping Installation

[fill in box number]

Instructions: Step 1: Circle Yes or No, or fill in with requested information.
 Step 2: Explain all "No" responses at the bottom of the card.
 Step 3: Attach bar code sticker from equipment when finished, return card to your Field Supervisor.

Item		Response	
		Yes	No
1	Piping is fully supported		
2	Control valve and maintainable items are accessible		
3	The following components are installed, from supply line to return line:		
4	Ball valve		
5	Union-Coil-Union		
6	Manual air vent		
7	Pete's Plug		
8	2-way automatic control valve		
9	Manual drain valve		
10	Manual flow meter valve		

"No" Responses ←

Item	Reason for "No"

Place Sticker Here

FIG. 5

Parallel Fan Powered VAV Terminal w/ heat # _____ [Fill in Tag #]

Controls Installation

[fill in box number]

Instructions: Step 1: Circle Yes or No, or fill in with requested information.
 Step 2: Explain all "No" responses at the bottom of the card.
 Step 3: Attach bar code sticker from equipment when finished, return card to your Field Supervisor.

Item		Response	
		Yes	No
1	Point-to-point connections of control wiring verified		
2	Temperature sensor calibration verified		
3	Central system accurately represents conditions of VAV box		

"No" Responses ←

Item	Reason for "No"

Place Sticker Here

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FIG. 6

Parallel Fan Powered VAV Terminal w/ heat # _____ [Fill in Tag #]
Electrical

[fill in box number]

Instructions: Step 1: Circle Yes or No, or fill in with requested information.
 Step 2: Explain all "No" responses at the bottom of the card.
 Step 3: Attach bar code sticker from equipment when finished, return card to your Field Supervisor.

Item		Response	
		Yes	No
1	Local disconnect installed in accessible location	Yes	No
2	Variable speed selector switch is operational	Yes	No
3	Motor rotation in proper direction	Yes	No
4	P.E. switch is operational	Yes	No

"No" Responses

Item	Reason for "No"

Place Sticker Here

09848110-050301

FIG. 7

Parallel Fan Powered VAV Terminal w/ heat Contractor Book	
Controls Start-up	VAV A-4
1. Cooling/heating (when present) sequence of control correct	yes / no
2. Warm-up/cool-down sequence of control correct	yes / no
3. Unoccupied sequence of control correct	yes / no

"No" Responses:

Item	Reason for "No"	Item

Place Sticker Here

FIG. 8

Parallel Fan Powered VAV Terminal w/ heat Contractor Book	
TAB	VAV A-4
1. Modifying unit/system settings through temperature sensor working	yes / no
2. Airflow sensor calibration verified	yes / no
3. Minimum airflow, cfm (design/measured)	/
4. Maximum airflow, cfm (design/measured)	/

"No" Responses:

Item	Reason for "No"

Place Sticker Here

FIG. 9



VAV Terminal w/ heat
VAV A-4
Controls Start-up



VAV Terminal w/ heat
VAV A-4
TAB



VAV Terminal w/ heat
VAV A-4
Delivery Book



VAV Terminal w/ heat
VAV A-4
Hanging



VAV Terminal w/ heat
VAV A-4
Connecting Ductwork



VAV Terminal w/ heat
VAV A-4
Piping Installation



VAV Terminal w/ heat
VAV A-4
Controls Installation



VAV Terminal w/ heat
VAV A-4
Electrical

050301-018409

FIG. 10

Piping Installation

Date: _____
[fill in current date]

Instructions: Step 1: Circle Yes or No, or fill in with requested information.
Step 2: Explain all "No" responses at the bottom of the card.
Step 3: Describe work completed today and return card to your Field Supervisor.

Item	Task Description	Response	
		Yes	No
1	Piping is clean and free of damage prior to installation	Yes	No
2	Maximum support spacing is according to table on back, or closer as necessary	Yes	No
3	All connections meet specification requirements	Yes	No
4	All equipment requiring maintenance is accessible (valves, junction boxes, etc.)	Yes	No
5	All pipe openings temporary sealed to maintain duct system cleanliness	Yes	No
6	Record drawings have been updated to reflect any changes made	Yes	No

"No" Responses

Item	Reason for "No"

Briefly Detail Work Completed Today

FIG. 11

Ductwork Installation

Date: _____
[fill in current date]

Instructions: Step 1: Circle Yes or No, or fill in with requested information.
Step 2: Explain all "No" responses at the bottom of the card.
Step 3: Describe work completed today and return card to your Field Supervisor.

Item	Task Description	Response	
		Yes	No
1	Ductwork is clean and free of damage prior to installation	Yes	No
2	There are supports every 6 feet, or less as required	Yes	No
3	All latitudinal and longitudinal joints are sealed (<1% leakage required)	Yes	No
4	All equipment requiring maintenance is accessible (valves, junction boxes, etc.)	Yes	No
5	All duct openings temporary sealed to maintain duct system cleanliness	Yes	No
6	Record drawings have been updated to reflect any changes made	Yes	No

"No" Responses

Item	Reason for "No"

Briefly Detail Work Completed Today

T02050" OF T34360

Fig. 12

VAV Terminal Construction Checklist

XYZ Corporate Headquarters
Equipment Number: VAV A-1

1) Model Verification

		Specified	Submitted	Installed
A	Data to Verify:			
	Manufacturer			
	Model			
	CFM (Max/Min)	/	/	/
	Serial Number			
	Inlet Diameter, inches			
	Heating MBH/gpm			
	Fan Power, hp			
	Total Static Pressure, psig			

2) Pre-Installation Checks

The following must be completed upon delivery of equipment to the work-site.


		Contractor	Initials	SEH
A	Physical Checks	Mechanical		
	There is no physical damage to the box	yes / no		
	The air openings to the box are sealed with durable plastic	yes / no		
	The airflow sensing tubing is plugged	yes / no		
	The local disconnect is in the proper location	yes / no		
	The enclosure for the DDC control panel is in the proper location	yes / no		
	The grommets for the airflow sensing tubing are secure	yes / no		
	Unit tags affixed	yes / no		
B	Component Verification	Mechanical		
	Manufacturer's ratings are readable	yes / no		
	Manufacturer's ratings are accurate	yes / no		

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3) Physical Installation Checks

		Contractor	Initials	Grade
A	Hanging of Box	Mechanical		
	Unit, damper, and air valve tags affixed	yes / no		
	Unit secured as required in specifications	yes / no		
	Adequate clearance around controls for O&M			
	6" clearance in front of air valve for travel of inner valve rod	yes / no		
	1 1/2 duct diameters before the air valve	yes / no		
	No duct transitions upstream of box for 30"	yes / no		
	No obstructions below box to remove bottom access panel	yes / no		
	Vibration isolators in good condition	yes / no		
	No metal to metal connections to cause noise problems	yes / no		
	Box properly labeled (box tag easy to see)	yes / no		
B	Ductwork - Primary Air Inlet	Mechanical		
	Primary ductwork all hard or maximum flex duct length of 1 foot	yes / no		
	All inlet elbows long radius and no kinks in flex duct	yes / no		
	1 1/2 duct diameters prior to air valve	yes / no		
	No transitions upstream for at least 36"	yes / no		
	Record drawings accurate	yes / no		
	Vibration isolator if flex duct is not used	yes / no		
	Does not interfere with accessibility	yes / no		
C	Ductwork - Outlet	Mechanical		
	Vibration isolator in place with no holes	yes / no		
	No kinks in flex duct	yes / no		
	Record drawings accurate	yes / no		
D	Controls	Controls		
	Control wiring hooked up	yes / no		
	Temperature sensor hooked up	yes / no		
	Communication with central system	yes / no		
	Temperature sensor calibrated	yes / no		
	Cooling sequence of control correct (should be attached)	yes / no		
	Heating sequence of control correct (should be attached)	yes / no		
	Warm-up sequence of control correct (should be attached)	yes / no		
	Cool down sequence of control correct (should be attached)	yes / no		
Unoccupied sequence of control correct (should be attached)	yes / no			

Fig. 15

XYZXYZ Corporate Headquarters	3D
Return to Supervisor	
Questions? Ask supervisor.	 *00301900130*

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